

REMARKS

Initially, Applicants wish to respectfully thank the Examiner for acknowledging acceptance of the drawings filed on May 4, 2006. Applicants further wish to respectfully thank the Examiner for acknowledging their claim for foreign priority under 35 U.S.C. § 119, and for confirming that the certified copy of the priority document, upon which the above-noted claim for priority is based, has been received. Applicants also wish to respectfully thank the Examiner for acknowledging consideration of the Oath/Declaration filed on May 4, 2006.

Applicants further wish to respectfully thank the Examiner for acknowledging consideration of the Information Disclosure Statements filed on August 4, 2006; September 13, 2006 and July 6, 2007. However, Applicants note that seven Japanese documents were crossed out on the returned copies of the Forms PTO 1449 that accompanied the Information Disclosure Statements filed on August 4, 2006 and July 6, 2007, and that the Examiner indicated, in the above-mentioned Office Action, that these documents were not considered because copies of these documents were not submitted.

In this regard, based on a review of Applicants' file record, Applicants believe that copies of these documents were submitted together with the Information Disclosure Statements. Applicants further note that four the seven documents were cited by the Examiner in the Office Action, which indicates that the Examiner has considered the documents. Applicants also note that the seven Japanese documents are among "Available Documents" in the "Image File Wrapper" for the present application in the Patent Application Information Retrieval (PAIR) system, which indicates that copies of these documents have been received by the U.S. Patent and Trademark Office.

Accordingly, Applicants are submitting, concurrently herewith, a "Completion of Record" and a Form PTO-1449 listing the seven Japanese documents to ensure consideration of these properly submitted documents.

In the Office Action, the Examiner rejected claims 1-8 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of commonly assigned U.S. Patent Application No. 10/577,133 and claims 1-8 of commonly assigned U.S. Patent Application No. 10/583,773. The Examiner rejected claims 1, 2, 5, 6 and 8 under 35 U.S.C. 102(b) as being anticipated by MASATOSHI (JP 06-309231). The Examiner rejected claim 3 under 35 U.S.C. 103(a) as being unpatentable over MASATOSHI in view of YASUTO (JP 08-069417). The Examiner rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over MASATOSHI in view of TAMOTSU (JP 61-016348). The Examiner rejected claim 7 under 35 U.S.C. 103(a) as being unpatentable over MASATOSHI in view of PATERU (JP 09-259036).

With respect to the nonstatutory double patenting rejection of claims 1-8 in view of claims 1-10 of commonly assigned U.S. Patent Application No. 10/577,133 and claims 1-8 of commonly assigned U.S. Patent Application No. 10/583,773, Applicants submit that each of the present application and the commonly assigned applications deals with a different cache memory and its control method. For example, in the cache memory of the present application, a cache termination attribute is used to indicate whether a cache entry is allowed to be terminated. Such a feature is not disclosed or taught in either commonly assigned U.S. Patent Application No. 10/577,133 or commonly assigned U.S. Patent Application No. 10/583,773. Accordingly, at least for this reason, Applicant respectfully requests withdrawal of the nonstatutory double patenting rejection of claims 1-8.

With respect to the rejection of claims 1, 2, 5, 6 and 8 under 35 U.S.C. 102(b) as being anticipated by MASATOSHI, Applicants note that MASATOSHI is cited and discussed in the specification of the present application (i.e., paragraphs [0006] – [0008] discuss the features of MASATOSHI; paragraph [0009] discusses its shortcoming; and paragraph [0012] discuss how the shortcoming of MASATOSHI is avoided by the present invention). MASATOSHI discloses a cache memory control method that includes an autonomous write-back process for writing back dirty entries from the cache memory to the main memory. This process is performed periodically (paragraph [0018] and Fig. 1 of MASATOSHI), and is separate from a usual write-back process (involving evicting an entry from the cache memory, writing it back to the main memory, and loading a new entry from the main memory to the cache memory) (Abstract and claim 1 of MASATOSHI). The portion cited by the Examiner, i.e., Fig. 1, paragraphs [0018] – [0023], explains the operation flow of the autonomous write-back process. Namely, it selects a dirty entry in the cache memory, writes it back to the main memory when the bus between the cache memory and the main memory is idle, and sets a caching state of the entry as clean when the write back operation ended normally. This feature is different from that of the present invention, in which a cache entry having a caching termination attribute, in addition to a dirty flag (emphasis added), is written back to the main memory, the caching termination attribute being added by an addition unit of the cache memory, as recited in Applicants' independent claims 1 and 8. Further, the addition unit and the process for adding a caching termination attribute to a cache entry of the present invention is not disclosed in MASATOSHI.

In view of the above, Applicants submit that MASATOSHI fails to disclose each and every feature of Applicants' claimed invention, as is required to support an anticipation rejection under 35 U.S.C. §102. Therefore, claims 1, 2, 5, 6 and 8 are allowable over MASATOSHI.

Claims 3, 4 and 7 are allowable at least for depending, directly or indirectly, from an allowable independent claim 1, as well as for additional reasons related to their own recitations.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection, along with an indication of the allowability of all the pending claims, in due course.

Should the Examiner have any questions or comments regarding this response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,
Hazuki OKABAYASHI et al.

Bruce H. Bernstein
Reg. No. 29,027

William Pieprz
Reg. No. 33630

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GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191